

Watervliet Arsenal
Headquarters
(Building 10, Campbell Hall)
Buffington Street west of the intersection
of Buffington Street and Dalliba Avenue
Watervliet
Albany County
New York

HABS No. NY-5521A

HABS
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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey
National Park Service
Department of the Interior
Washington, D.C. 20013-7127

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HISTORIC AMERICAN BUILDINGS SURVEY

WATERVLIET ARSENAL
HEADQUARTERS
(Building 10, Campbell Hall)

HABS No. NY-5521A

Location: Buffington Street west of the intersection of
Buffington Street and Dalliba Avenue,
Watervliet Arsenal,
Watervliet,
Albany County, New York.

USGS Troy South Quadrangle, Universal Transverse
Mercator Coordinates: 18.605820.4730440

Present Owner and Occupant: U.S. Army

Present Use: Arsenal headquarters and offices

Significance: Since its construction as the arsenal
headquarters in 1894, the building has served a
central role in Watervliet's history. Its
original construction and subsequent additions
reflect various periods of growth at the arsenal.

PART I. HISTORICAL INFORMATION

A. Physical History:

1. Date of erection: The first and second stories of Unit 2, the original section of the building, were constructed in 1894, and a third story was added in 1917. Units 3 and 4 followed in 1918. Unit 5 was built in 1941 and Unit 1 in 1942.
2. Architect: Not known. The building was probably designed by Ordnance Department personnel.
3. Original and subsequent owners: U.S. Army
4. Builder, contractor, suppliers: The construction contract for Unit 2 was awarded to James McFerran of West Troy, New York in 1894 (Annual Report of the Secretary of War, 1894, p. 156).

The completion report on buildings erected during World War I lists sources of materials for extension of the building. Most of the woodwork was obtained from Troy, and the millwork and sash came from Watervliet. Brick was purchased in Watervliet and Troy. Specific companies were not named (Completion Report, p. 10).

5. Original plans and construction: A set of early drawings illustrating floor and roof plans, longitudinal and cross sections, and elevations of Unit 2 are on file in the arsenal's

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Engineering Division. Several of the drawings were revised in 1920 or later to incorporate the third story added in 1917 (HABS Photo No. NY-5521A-9 through HABS Photo No. NY-5521A-11). Drawings documenting the addition of Units 1, 3, 4, and 5 are also in the Engineering Division.

A photograph in the collection of the Watervliet Arsenal Museum shows the original structure as a rectangular, two-story, hip-roofed building with chimneys north and south of the ridge line. Later photographs which are also in the Museum's files document the construction of Units 3 and 4 (HABS Photo No. NY-5521A-6 and HABS Photo No. NY-5521A-7).

6. Alterations and additions: Unit 2 appears to have remained unaltered until 1917 when a third story matching the earlier construction was added. Unit 3, a two-story, hip-roofed wing with little detailing, and Unit 4, which was similar in appearance to Unit 2, were added the following year.

Units 1 and 5, both flat-roofed, brick wings, were erected in 1942 and 1941 respectively forming the building's current U-shaped configuration. The pilasters and belt courses found on the adjacent units are repeated on the additions.

B. Historical Context:

In 1887 Watervliet Arsenal was designated the Army's gun factory, setting off a building program which lasted into the mid-1890s. Funds were appropriated for construction of a new headquarters building in 1894 to replace an earlier inadequate administration building. Increased activity at the arsenal during both world wars necessitated expanded administrative capacities. Consequently, the building was enlarged in 1917-1918 and again in 1941-1942. It still houses the arsenal headquarters, as well as various administrative offices. In 1963 the building was named Campbell Hall in honor of Lt. Thomas L. Campbell, the arsenal's temporary commandant from 1813 to 1816 (A History of Watervliet Arsenal, p. 198). (For further documentation see HAER No. NY-1A.)

PART II. ARCHITECTURAL INFORMATION

A. General Statement:

1. Architectural character: Built in five sections between 1894 and 1942, this U-shaped structure conforms to the small scale and use of classical detailing found on many of the arsenal's earlier buildings.

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2. Condition of fabric: The building is in good condition and is well maintained.

B. Description of Exterior:

1. Over-all dimensions: The building is composed of five units, which together form a U-shaped configuration. Unit 1 is 70' (south) x 75'; Unit 2 is 75' (east) x 50'; Unit 3 is 75' (east) x 50'; Unit 4 is 75' (east) x 50'; and Unit 5 is 70' (north) x 75'. Unit 3 is joined to Unit 2 on the south and Unit 4 on the north by enclosed, recessed passageways 15' wide. The entire building is 225' wide by 120' deep. Units 1, 3, and 5 are two stories, and Units 2 and 4 are three stories. Only Units 2, 4, and 5, and the passageways between Units 2 and 3 have basements.
2. Foundations: Units 1, 3, 4, and 5 have concrete foundations. The water table on Unit 3 is brick. The foundations of Unit 2 are coursed ashlar with a stone water table.
3. Walls: Walls of all five units are red brick laid in 5/1 common bond. Brick pilasters are arranged symmetrically on all exposed elevations of Units 1, 2, 4, and 5, and a brick belt course runs between the first and second floors of the same units.
4. Structural system, framing: Exterior walls are load bearing. Concrete columns support concrete girders in Unit 1. Paneled square wood posts support paneled wood girders in Units 3, 4, and 5.
5. Porches, stoops: Six concrete steps lead to a platform at the main entrance on the south side of Unit 1. Cast-iron rails connect round decorated posts on the lower step and on the platform. Trophy cannon are set on the blocks flanking the steps (HABS Photo No. NY-5521A-4).

One-bay pedimented porches mark the main entrances on the south and east sides of Unit 2. Each has cast-iron rails and newel posts similar to those at the south entrance to Unit 1 (HABS Photo No. NY-5521A-1). A similar porch with denticulated pediment and hollow pipe railing is centered on the east elevation of Unit 4.

6. Openings:

- a. Doorways and doors: The main entrance to Unit 1 is defined by a classical frame with fluted pilasters, architrave, and pediment with denticulated cornices. The tympanum contains

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a bronze Ordnance Department emblem. The doors are double-leaf glass in wood frames with bronze x-bracing set below a five-light transom with bronze decoration (HABS Photo No. NY-5521A-4).

On the south side of Unit 2, there are three glazed wood personnel doors with single-light transoms. Only the center door is operable. Doors on the east side of the unit are double-leaf glass with a transom.

A paneled glazed wood door with four-light transom and four-light sides provides access to Unit 4 on the east side, and a wood overhead door opens to the basement on the north side. Remaining doors on the building are glazed wood or glass personnel.

- b. Windows: Typical windows are one-over-one-light, double-hung wood sash. Windows on Units 1, 4, and 5 have brick flat-arch lintels and concrete lug sills. Those on Unit 2 have stone lug sills and brick flat-arch lintels. Sills on Unit 3 are concrete, and lintels are brick segmental arches.

7. Roof:

- a. Shape, covering: Units 2, 3, and 4 have asphalt shingled hip roofs. Roofs on Units 1 and 3 are flat, and Unit 1 has a parapet.
- b. Cornice, eaves: A paneled, galvanized iron frieze above corbelled brick courses encircles Unit 1 over the second story. The frieze marks the original height of the unit. A second metal frieze is set below the boxed eaves. The arrangement of metal friezes is mirrored on Unit 4. Rafters are exposed on Unit 3. Unit 5 has a plain metal cornice.

C. Description of Interior:

1. Floor plans:

- a. Basement: The basement under Unit 2 has a central hall entered at the south end by the stairs from the first floor. Five rooms open off the east and west sides of the hall, and a vault is at the north end. At the north end of the unit, the hall turns west and then south to open onto the passageway between Units 2 and 3. There are three rooms and stairs in the passageway. (See supplemental material, floor plan)

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Unit 4's basement is open with two rows of heavy wood supports running north-south. An elevator is located in the southwest corner. (See supplemental material, floor plan)

A door on the west side of Unit 4 opens to a hallway in the basement of Unit 5. the stairs from the first floor open onto the hall on the north, and a series of rooms open off the south and east sides of the hall. (See supplemental material, floor plan)

- b. First floor: The south entrance to Unit 1 opens to a short hall with the stairs on the east. The hall intersects a second hallway running east-west. Six offices bordering the south and west walls open off the hall. North of the hall are a large office and two smaller offices. (See supplemental material, floor plan)

The south entrance to Unit 2 opens to a central hall running north-south with the stairs at the south end. Four offices and a shorter hall from the east entrance open off the east side of the hall. On the west side, is a restroom and two offices. The central hall leads directly to the passageway between Units 2 and 3, which contains the stairway. (See supplemental material, floor plan)

Unit 3 consists of a central hall entered from the north and south with offices along the east and west walls. The hall opens onto the passageway between Units 3 and 4, which contains a stairway, storage room, and restroom. (See supplemental material, floor plan)

In Unit 4, offices along the east and north walls open off an L-shaped hall leading from the passageway on the south side. A vault and elevator are in the southwest corner of the unit. (See supplemental material, floor plan)

The stairs in Unit 5 are located along the north wall, and restrooms and offices line the south wall. The remainder of the unit is essentially an open space with movable partition walls sectioning it into additional offices. (See supplemental material, floor plan)

- c. Second floor: Four offices and the stairs are along the south wall of Unit 1. The remainder of the unit is open with two small offices on the north. (See supplemental material, floor plan)

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In Unit 2, the stairs from the first floor lead to a central hall terminated on the north by a vault. Three offices are on the east side and restrooms and four offices are on the west side. At the north end, the hall turns west and then north into the passageway between Units 2 and 3. The passageway contains stairs and a restroom. (See supplemental material, floor plan)

With the exception of an office in the southeast corner, Unit 3 is sectioned by movable partition walls, which form a central hall with offices opening off the east and west sides. The hall leads to the passageway between Units 3 and 4, which contains stairs and a restroom. (See supplemental material, floor plan)

Unit 4 contains a vault and elevator in the southwest corner, an office in the southeast corner, and additional offices defined by movable partition walls elsewhere. (See supplemental material, floor plan)

Restrooms and offices line the south wall of Unit 5. A T-shaped hall entered from the east and north is defined by movable partition walls, which divide the center of the unit into two large office areas. Additional offices and the stairs are along the north wall. (See supplemental material, floor plan)

- d. Third floor: In Unit 2, a stairway, restroom, and office are on the south, and a vault and office are on the north. The remainder of the unit is open. A door west of the vault opens to the passageway between Units 2 and 3, which contains stairs and a restroom. (See supplemental material, floor plan)

A vault and elevator occupy the southwest corner of Unit 4, and offices are in the northeast and southeast corner. Movable partitions section the remainder of the unit into office space. The unit opens on the south to the passageway between Units 3 and 4, which contains stairs and restrooms. (See supplemental material, floor plan)

2. Stairways: Stairways located in the passageways between Units 2 and 3 and Units 3 and 4 and on the north wall of Unit 5 are metal dog-leg stairs. Stairs on the south wall of Unit 1 are metal, two flights with one landing. An original dog-leg stair with winders remains in Unit 2 at the south end of the central hall.

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The newel posts, balustrade, treads, and risers are painted metal, and the treads are covered with a rubber surface (HABS Photo No. NY-5521A-5).

3. Flooring: Basement floors are concrete in Units 2 and 4 and linoleum in Unit 5. The hallway floor on the first floor of Unit 2 is black and white marble squares. Remaining floors are carpeted or linoleum.
4. Wall and ceiling finish: Exterior walls in Unit 5 and walls in the passageways are brick. Walls elsewhere are drywall, plastered, paneled, or papered. Metal and glass or wood and glass movable partitions section many areas into office spaces. Ceilings are either accoustical tile or plastered. First and second floor ceilings in Unit 1 are vaulted.
5. Openings:
 - a. Doorways and doors: Doorways in the second floor hallway of Unit 2 contain paneled wood doors and molded trim with corner blocks. Doors elsewhere are modern wood or metal personnel.
 - b. Windows: Windows in the office in the southeast corner of Unit 2 have molded trim with corner blocks. Remaining windows are set in openings with plain wood surrounds or in openings with no surrounds.
6. Decorative features and trim: Only two fireplaces in Unit 2 remain uncovered. Located back-to-back in the offices in the northeast corner, their rectangular openings are framed by partially fluted pilasters, a frieze with horizontal fluting, and a plain mantel shelf. The mantels, which have been repeatedly painted, are probably marble. The fire box is metal lined.
7. Mechanical equipment:
 - a. Heating, air conditioning: The building is heated by steam and cooled by window air conditioners.
 - b. Lighting: Light is provided by fluorescent ceiling fixtures.
 - c. Plumbing: Plumbing fixtures are modern.

D. Site:

The building faces east onto Buffington Street at the head of Dalliba Avenue. Sidewalks lead to all major entrances on the south and east,

and a cannon captured from General Burgoyne at Saratoga is set on the lawn southeast of the building. To the east are the family quarters, an area of spacious lawns, and tree-lined curving drives. To the south and west is the arsenal's closely built industrial and maintenance area.

PART III. SOURCES OF INFORMATION

A. Architectural Drawings:

Cellar, First Floor, Second Floor, and Roof Plans, ca. 1893-1897.
Watervliet Arsenal Engineering Division. (HABS Photo No. NY-5521A-8)

Second Story Plan Showing Third Tier I-beams, Old Main Office. 1894.
Watervliet Arsenal Engineering Division.

First Floor Plan Showing Second Tier I-beams, Old Main Office Building. 1894. Watervliet Arsenal Engineering Division.

Basement Plan Showing First Tier I-beams, Old Main Office Building. 1894. Watervliet Arsenal Engineering Division.

Longitudinal Section Looking West. 1894; revised in 1920 to incorporate the third floor. Watervliet Arsenal Engineering Division.

Cross Section Looking North. 1894; revised in 1920 to incorporate the third floor. Watervliet Arsenal Engineering Division.

Front Elevation, Old Main Office Building. May 19, 1894; revised in 1920 to incorporate the third floor. Watervliet Arsenal Engineering Division. (HABS Photo No. NY-5521A-9)

South Elevation, Old Main Office Building. May 19, 1894; revised in 1920 to incorporate the third floor. Watervliet Arsenal Engineering Division. (HABS Photo No. NY-5521A-10)

West Elevation, Old Main Office Building. May 19, 1894; revised in 1920 to incorporate the third floor. Watervliet Arsenal Engineering Division. (HABS Photo No. NY-5521A-11)

Drawings for Addition to Office Building. 1918. 28 sheets, includes elevations, floor plans, utilities, door, skylight, and porch details. Watervliet Arsenal Engineering Division.

Addition to Building 10, Unit 4. 1941. 6 sheets, includes elevations, floor plans, and sections. Watervliet Arsenal Engineering Division.

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Elevations and Details, Window Details, Stair Details, Construction Details for Unit 5. 3 sheets. 1942. Watervliet Arsenal Engineering Division.

B. Early Views:

View looking west along Dalliba Avenue. Ca. 1898. Watervliet Arsenal Museum. Shows Unit 2 before third story was added.

West (rear) elevation of Units 4, 3, and 2, showing Unit 4 under construction. Dated September 30, 1918. Watervliet Arsenal Museum. (HABS Photo No. NY-5521A-6)

East (front) elevation of Units 2, 3, and 4. Probably taken about 1918. Watervliet Arsenal Museum. (HABS Photo No. NY-5521A-7)

C. Bibliography:

Secondary and published sources:

Annual Report of the Secretary of War for the Year 1894. Vol 3, Ordnance. Washington, D.C.: Government Printing Office, 1895. Gives the name of the contractor.

Building Technology, Inc. Historic Properties Report Watervliet Arsenal, Watervliet, New York and Rotterdam Family Housing Area, Rotterdam, New York. January 1985. The report and inventory cards for the arsenal are filed as field records in the Prints and Photographs Division, Library of Congress under HAER No. NY-1A.

Completion Report of Buildings Constructed by the Construction Division of the U.S. Army at Watervliet Arsenal, Watervliet, New York, May to December, 1918. No. pl: n. pub., n.d. Contains information on the enlargement of the building during World War I.

A History of Watervliet Arsenal, 1813 to Modernization 1982. Watervliet, New York: U.S. Army, Watervliet Arsenal, n.d. Notes that the building was named for former commander, Lt. Thomas L. Campbell.

Kyle, Francis K. A History of Watervliet Arsenal. Watervliet, New York: Watervliet Arsenal, 1920. Quotes contemporary reports on the enlargement of the building during World War I. Copy available in the Watervliet Arsenal Museum.

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D. Likely Sources Not Yet Investigated:

Records of the Office of the Chief of Ordnance, Record Group 156, and Records of the Office of the Chief of Engineers, Record Group 77, Navy and Old Army Branch, National Archives, Washington, D.C. should be further investigated.

E. Supplemental Material:

Basement, First Floor, Second Floor, and Third Floor Plans, Campbell Hall, Building 10. Four sheets. No date. Watervliet Arsenal Engineering Division. Current floor plans of the building.

Prepared by: Barbara E. Hightower
Historian
MacDonald and Mack Partnership
February 1985

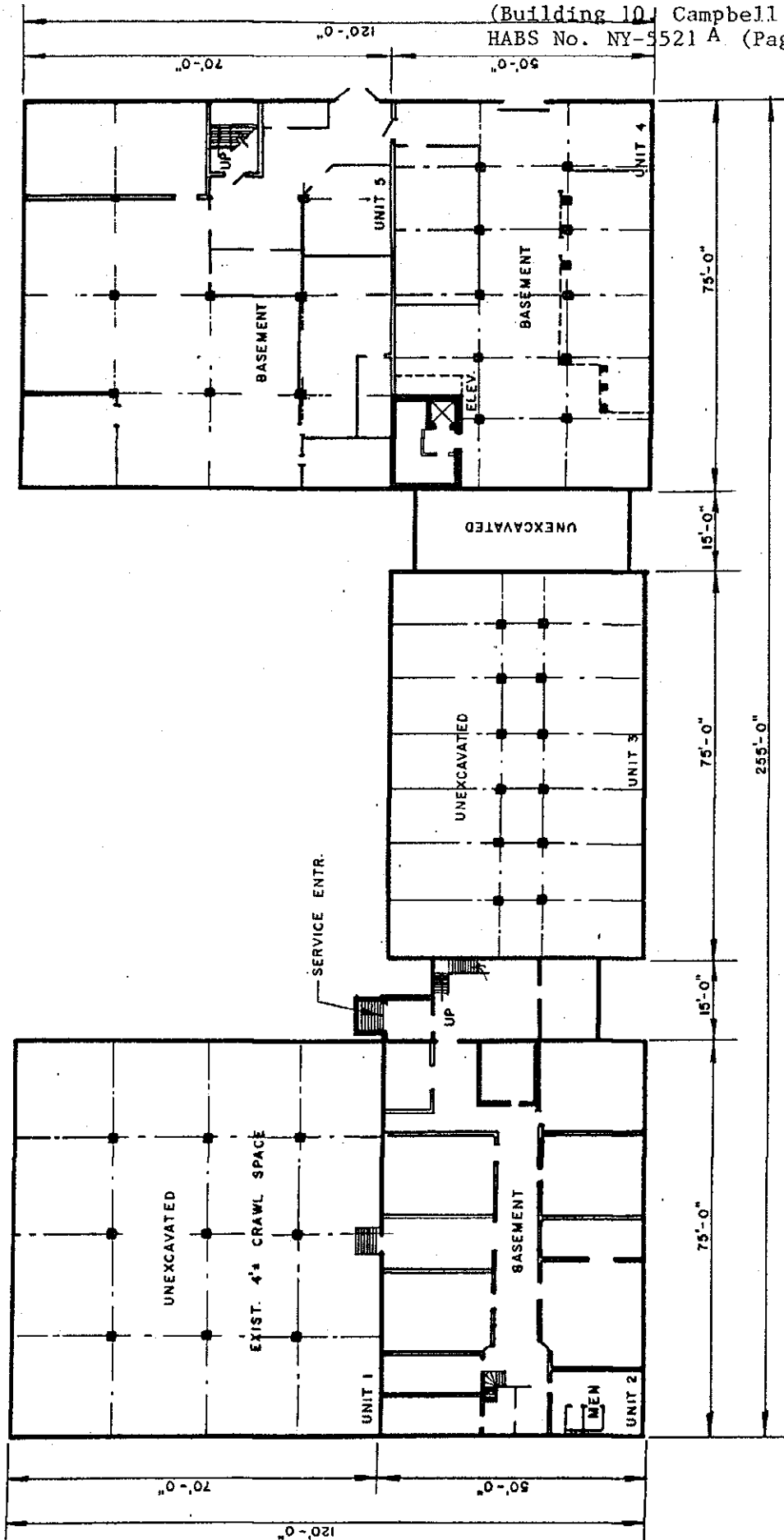
PART IV. PROJECT INFORMATION

This project was part of a program initiated through a memorandum of agreement between the National Park Service and the U.S. Department of the Army. Stanley H. Fried, Chief, Real Estate Branch of Headquarters DARCOM, and Dr. Robert J. Kapsch, Chief of the Historic American Buildings Survey/Historic American Engineering Record, were program directors. Sally Kress Tompkins of HABS/HAER was program manager, and Robie S. Lange of HABS/HAER was project manager. Under the direction of William A. Brenner, Building Technology Incorporated, Silver Spring, Maryland, acted as primary contractor, and MacDonald and Mack Partnership, Minneapolis, was a major subcontractor. The project included a survey of historic properties at Watervliet Arsenal, as well as preparation of an historic properties report and HABS/HAER documentation for 17 buildings. The survey, report, and documentation were completed by Barbara E. Hightower, historian, Minneapolis. The photographs were taken by Robert A. Ryan and J. Ceronie of Dennett, Muessig, Ryan, and Associates, Ltd., Iowa City, Iowa. Drawings were produced by Gary M. Louris, Minneapolis.

E. Supplemental Material
Floor Plan

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WATERVLIET ARSENAL

WATERVLIET, N.Y.

Drawn by: J.R. GANGLIA, A.E. App'd by: J.C. GANGLIA, A.E.

Revisions

Date

4/76

BASEMENT PLAN
CAMPBELL HALL
BUILDING NO. 10

NET FLOOR AREA

11,855
Square feet

FLOOR CAPACITY

1000 LBS
Per square foot

(Building 10, Campbell
HABS No. NY-5521 A.

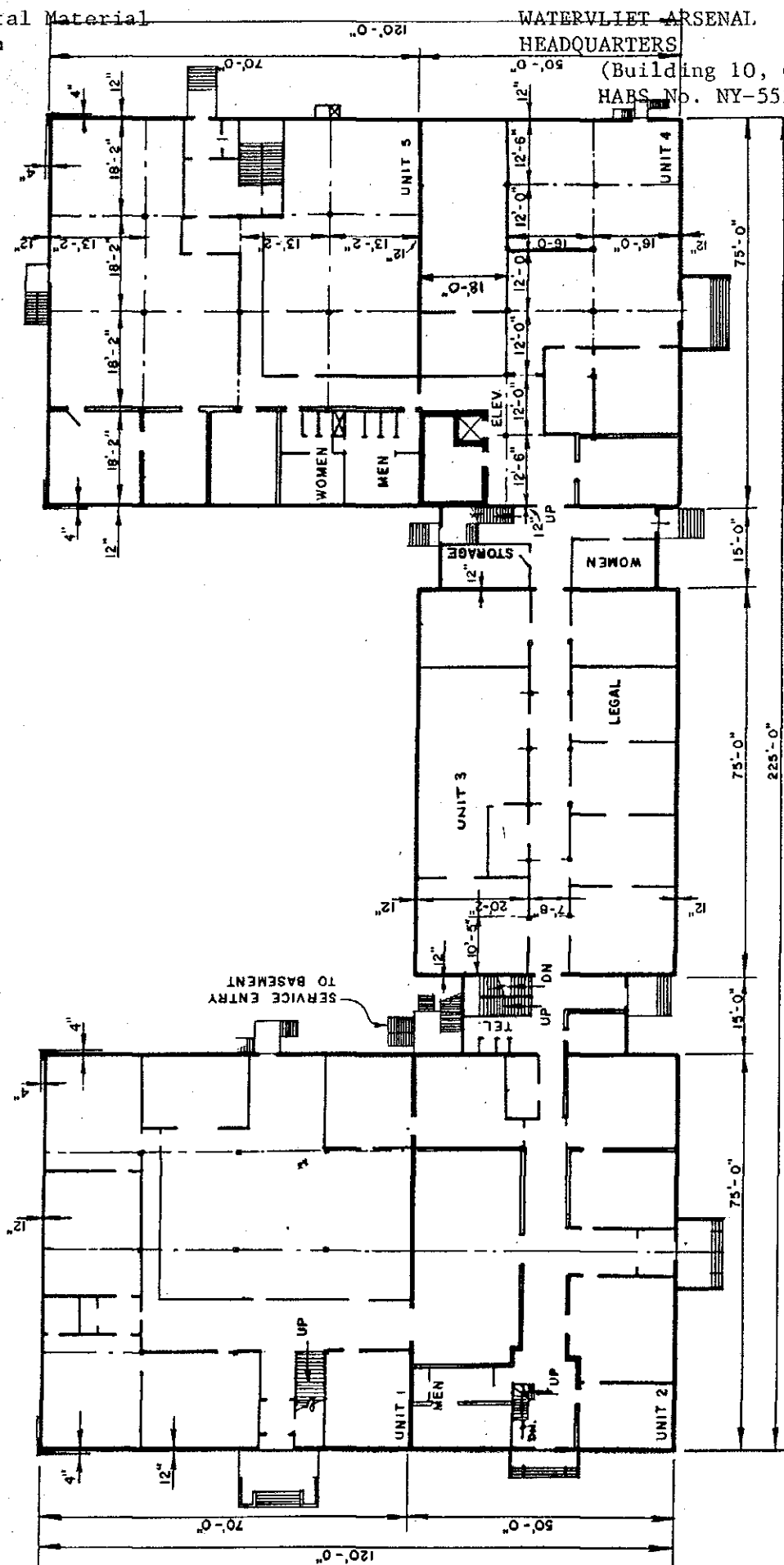
WATERVLIET ARSENAL

WATERVLIET, N.Y.

Drawn by: J.R.GANGEMI, A.E. App'd by: [Signature]

FIRST FLOOR PLAN
CAMPBELL HALL
BUILDING NO. 10

Scale: 1" = 30'-0" Date:



NET FLOOR AREA

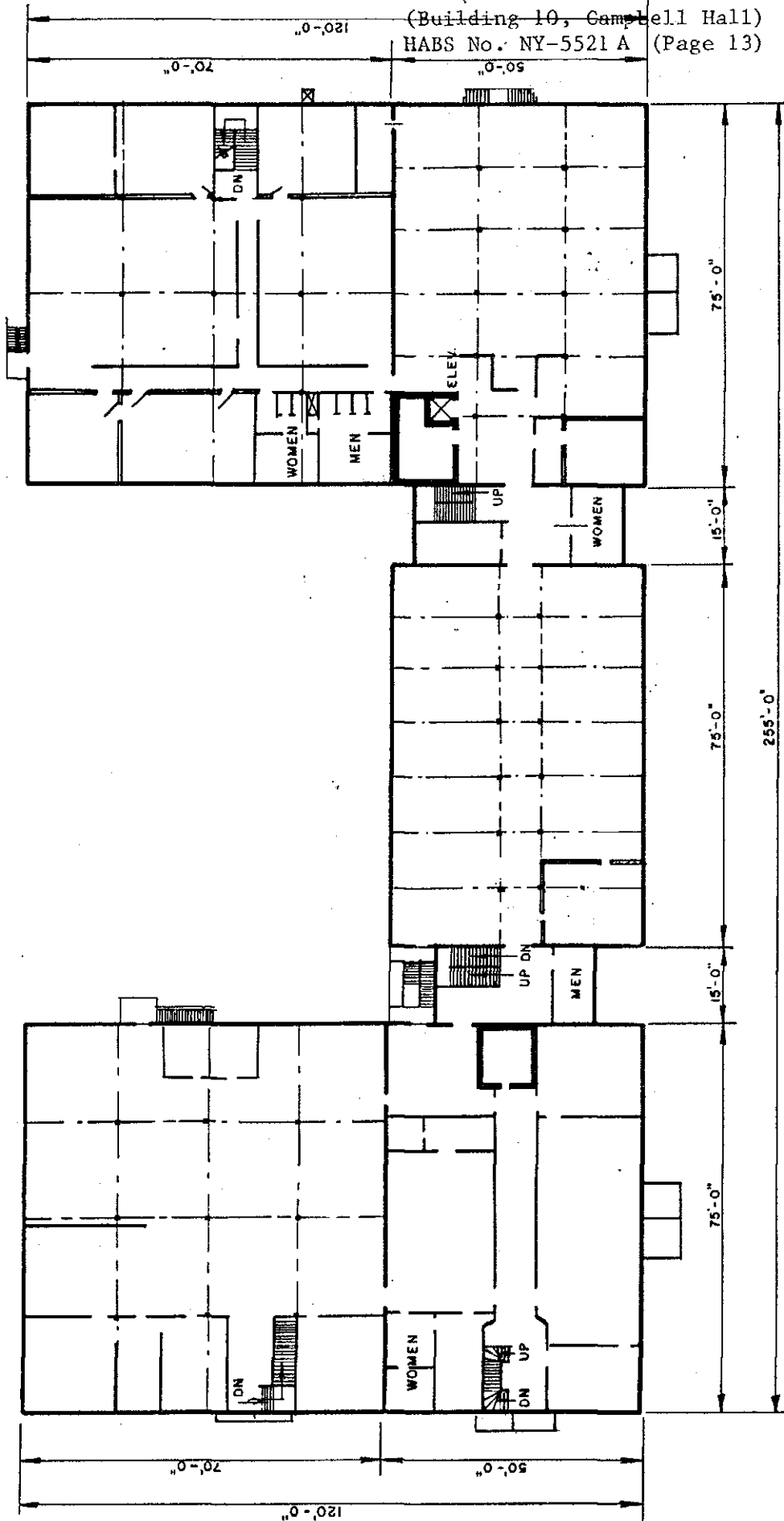
24,495
Square feet

FLOOR CAPACITY

Per square foot

E. Supplemental Material
Floor Plan

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HEADQUARTERS
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WATERVLIET ARSENAL

WATERVLIET, N.Y.

Drawn by: J.R.GANGEMI, A.E. App'd by: J.C. Korman

Revisions

Date

4/70

SECOND FLOOR PLAN
CAMPBELL HALL
BUILDING NO. 10

NET FLOOR AREA

21,495

Square feet

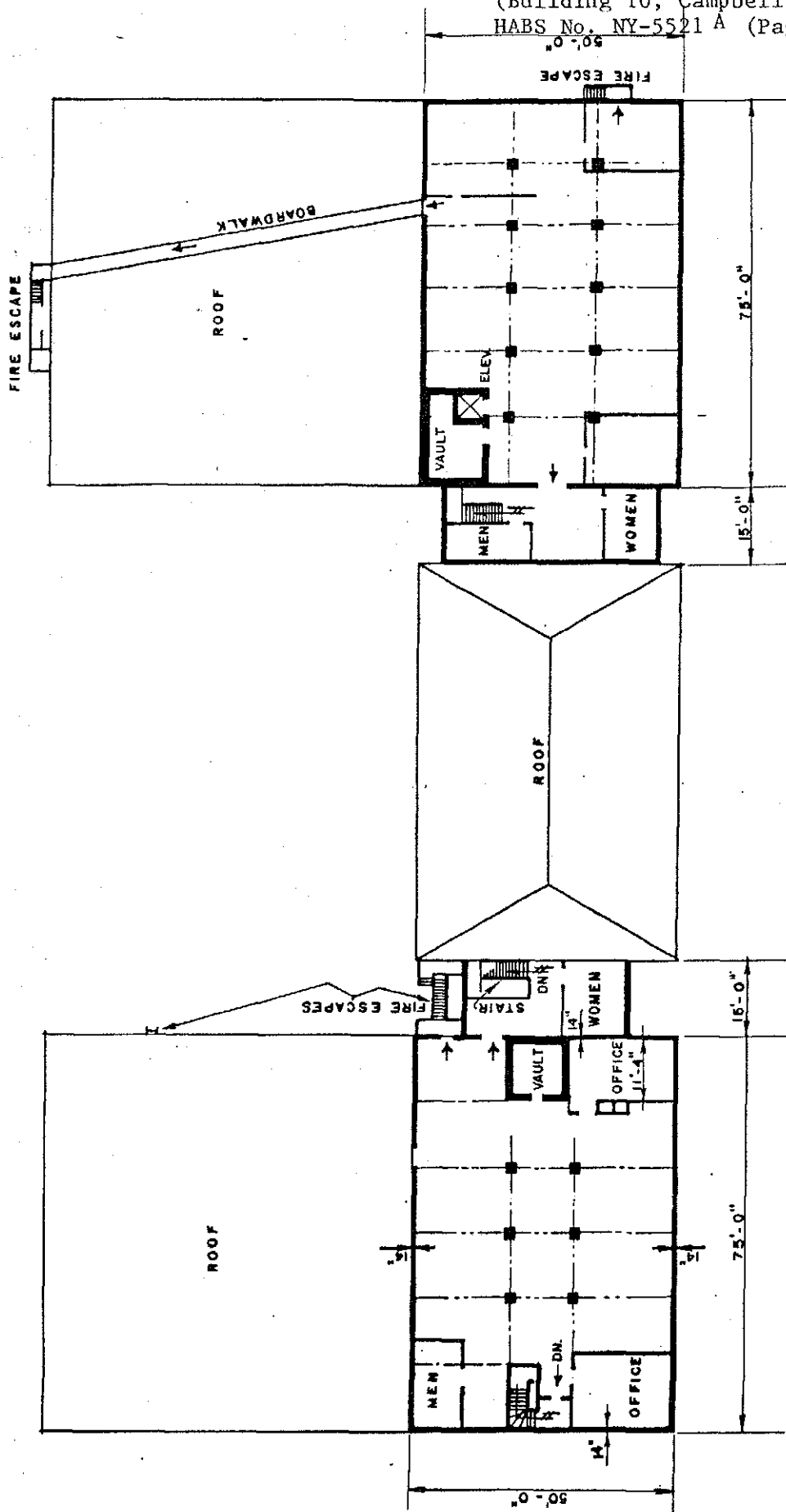
FLOOR CAPACITY

50 + CTR. 50 LBS. H. 40 LBS.
Per square foot



E. Supplemental Material
Floor Plan

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WATERVLIET ARSENAL
WATERVLIET, N.Y.

Drawn by: J.R. GANGEMI, A.E. App'd By: *[Signature]* Date: 4/76
Revisions: TR

THIRD FLOOR PLAN
CAMPBELL HALL
BUILDING NO. 10

Scale: 1" = 30'-0" Date: ?

NET FLOOR AREA
8,023
Square feet
FLOOR CAPACITY
30 LBS
Per square foot